DOCUMENT RESUME

ED 366 530 SO 023 679

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TITLE Integrating Thinking Skills into the Third Grade Social Studies Curriculum.
PUB DATE 93
NOTE 86p.; Ed.D. Practicum, Nova University.
PUB TYPE Dissertations/Theses - Practicum Papers (043)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Creativity; *Critical Thinking; *Curriculum Development; Curriculum Research; Elementary School Curriculum; Elementary School Students; *Grade 3; Learning Activities; Primary Education; *Social Studies; *Student Development; Teacher Attitudes; *Thinking Skills

ABSTRACT

This practicum was designed to help third grade students develop critical thinking skills of application, analysis, and synthesis in social studies activities. Teachers were unhappy with the teaching of social studies as it existed. Among the contributing causes were the lack of a critical thinking program, an over-dependence on commercially prepared worksheets, and the lack of student opportunities to explore their environment. Specific strategies were developed that addressed the integrating of thinking skills into the third grade social studies curriculum. The solution was to stress thinking skills through the teaching of three to five thinking skill strategies, problem solving techniques, the use of cooperative learning, wait time, and high level questioning techniques. Teachers also wrote and published six social studies units that were shared with other teachers. Although not all objectives were met, significant growth in thinking skills did occur. Most children showed improvement in application, synthesis, and analysis skills. Creative thinking was fostered by participation in an invention fair. Teacher in-service training sessions were another component of this practicum that was well received. (Author/SG)

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Integrating Thinking Skills into the Third Grade Social Studies Curriculum

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by

Geraldine E. Westwood

Cluster 32

A Practicum II Report presented to the
Ed.D. Program in Early and Middle Childhood
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

NOVA UNIVERSITY

1993

SO 023 079

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PRACTICUM APPROVAL SHEET

This practicum took place as described.

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March 19, 1993

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This practicum report was submitted by Geraldine E. Westwood under the direction of the adviser listed below. It was submitted to the Ed. D. Program in Early and Middle Childhood and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova University.

Approved:

Date of Final Approval of Report

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ABSTRACT

Integrating Thinking Skills into the Third Grade Social Studies Curriculum.
Westwood, Geraldine E., 1993: Practicum Report, Nova University, Ed.D. Program in Early and Middle Childhood.
Descriptors: Social Studies / Thinking Skills / Critical Thinking / Primary Education / Elementary Education / Elementary School Students.

This practicum was designed to assist third grade students in developing the critical thinking skills of application, analysis and synthesis in social studies activities. Teachers were unhappy with the teaching of social studies as it currently existed. Among the contributing causes were the lack of a critical thinking program, an over-dependence on commercially-prepared worksheets and the lack of student opportunities to explore their environment.

The writer designed specific strategies that addressed the integrating of thinking skills into the third grade social studies curriculum. The solution was to stress thinking skills through the teaching of 3-5 thinking skill strategies, problem solving techniques, the use of cooperative learning, wait-time and higher-level questioning techniques. Teachers also wrote and published six social studies units that were shared with other teachers.

Although all objectives were not met, significant growth in thinking skills did occur. Most children showed improvement in application, synthesis and analysis skills. Creative thinking was fostered by participation in an invention fair. Teacher in-service training sessions were another component of this practicum that was well received.

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CHAPTER I

INTRODUCTION

Description of the Community

This practicum took place in a rapidly-growing county located midway between two large, metropolitan cities on the eastern coast of the United States.

The county, one of the largest in the state, is approximately 410 square miles and is the third-fastest growing, mainly because of its location on a major interstate highway. Many businesses are relocating to the area due to an abundant labor supply, low taxes and easy accessibility to this throughfare.

The area is steeped in colonial history and was a valuable piece of real estate during the Civil War. For four years the area was turned into a bloody battleground which witnessed four major battles and more than 100,000 casualities.

The area is becoming very attractive to commuters and people seeking a less urban atmosphere. But the growth has led to an array of headaches. The growth has brought jobs, houses, people, stores and restaurants. It has also brought rising taxes, the need for new schools, more police and fire services, traffic jams, better roads to handle the amount of

traffic and longer commuting time.

According to the United States Bureau of the Census, the population in 1990 was 57,403. The population is 87% white, 11% black and 2% other.

The northern portion of the county has experienced a housing explosion. The southern portion, where the school is located, has seen little change, mainly due to its ruralness. The community is composed of single family and mobile homes.

In many families both parents work to support the family, with many commuting outside the area. Public transportation is non-existant in the county. The majority of persons (82.5%) work outside of the county and many join van and car pools or ride commuter buses to cut the expense of commuting daily to their jobs. Commuters spend at least 45 or more minutes on the road. Due to its ruralness, there are no day care centers available to care for children of these workers.

The 1990 self-study report of the school cites that approximately 14% of the parents of students attending this school have less than a twelfth grade education. Sixty percent of the parents have completed high school and 26% have met some portion or all of the requirements for a collegiate degree.

Most of the children attending the writer's school come from low to middle income homes. The majority of parents (46%) are employed as skilled workers, 17% are professional workers and 6% are employed by the federal government in military or civilian positions.

Approximately 26% of the students receive either free or reduced price lunch. During the winter months there is an increase of 5% due to a rise in the unemployment of fathers who are employed in the construction trade.

Writer's Work Setting and Role

The school is located in a rural area of the county on a 25 acre tract which includes a physical education field and a hard surface area for a multitude of physical activities due to the school having no gymnasium.

The original building was built in 1961 to house children in grades one through seven. In 1971 kindergarten was offered by the state, so a primary annex was built to house these children. Population growth continued, necessitating the construction of a wing to house grades one through three in 1979. This elementary school now houses kindergarten through fifth grade classrooms. Six modular units have been added to compensate for additional growth.

The writer's school population is 489 students with 87%

white, 12% black and 1% other (Asian, Hispanic, American Indian, and others). This school has not been affected by the surge in population that is taking place in some of the other schools in the county, mainly due to its ruralness.

There are approximately 31 teachers, 3 instructional assistants, one school nurse, an itinerant enrichment teacher and speech pathologist employed as staff members at this school. A principal, guidance counselor, secretary and an office assistant work in the administrative office. There are Chapter I funded programs in remedial reading and math as well as a county-funded remedial reading program at this school.

There are currently eleven elementary schools, four middle schools, three high schools and a vocational center in the county. The total school population in the county is approximately 12,140 students. Due to population growth, the school board is building two new elementary schools and a high school. School attendance zone changes will be anticipated next year, but will not affect the writer's school.

The writer's role has remained relatively unchanged since entering the teaching profession in 1973 and has made four job location transfers during this time.

She has taught in the practicum setting since August 1990. The chief responsibility of the writer is to teach a

self-contained third grade class. She is supervised by the principal. Major duties and responsibilities that are assigned by the local school board include:

1. Creating a classroom environment that is conducive to effective learning.
2. Diagnosing students' strengths and needs on a regular basis.
3. Communicating with parents through interim reports, report cards, newsletters and conferences to discuss the students' academic progress.
4. Participating on faculty committees and assisting with student activities.

The writer taught kindergarten in a larger elementary school in the same county for eight years before transferring to the practicum setting. Previously she was employed in two smaller rural counties as a kindergarten teacher for eight years and as a remedial math teacher for grades two through four for one year.

The educational background of the writer includes an undergraduate degree in elementary education and a masters degree in curriculum and instruction with emphasis in early childhood education. A Postgraduate Professional certificate with endorsements for grades kindergarten through seven, as well as elementary principal, is held by the writer.

In the practicum setting the writer has participated actively in extra-curricular activities. Among the activities include serving as grade level chairperson for two years, and participating on the self-study steering committee and the gifted and talented placement committee.

CHAPTER II

STUDY OF THE PROBLEM

Problem Description

In recent years much attention has focused on the great diversity of the American social system and the basic values and expectations that provides standards for behavior in American life. Before social studies became an interdisciplinary school subject, it took the form of courses in history and civics. During the late nineteenth and early twentieth centuries public school enrollments were expanding due to the millions of immigrants arriving in our country. Schools felt the need to educate them in democratic traditions and values and to prepare them to function as American citizens (Brophy, 1990).

In the elementary school the curriculum became standardized and drew not only from history and civics but geography, economics, psychology, sociology and anthropology. Instruction became dominated by textbooks that were primarily storehouses of facts.

The National Council for Social Studies (1990) defines social studies education as a basic component of the K-12 curriculum that :

(1) derives its goals from the nature of citizenship in

> a democratic society that is closely linked to other nations and peoples of the world; (2) draws its content primarily from history, the social sciences, and in some respects, from the humanities and science; (3) is taught in ways that reflect an awareness of the personal, social and cultural experiences and developmental levels of learners; and (4) facilitates the transfer of what is learned in school to the out-of-school lives of students. (p. 20)

The importance of social studies is seen as a key to providing information and ideas about people. places, and events that children must know if they are to comprehend the intent of news reports and information on tests (McKenzie, 1986).

Teachers and curriculum planners must take into consideration what goes into the social studies curriculum as well as the sequence. The tendency at the elementary grades is to arrange topics from the near-at-hand to the far-away; from the here-and-now to the past. In using the expanding-communities approach Hanna (1963) believes the logical starting point should be the family and move outward toward wider communities. The expanding-communities principle has been widely used in social studies curriculum planning at the elementary level since the 1930s (NCSS,

1990).

Ravitch (1987) critizes the expanding-communities framework. She believes curricula should be closely aligned to student's interests. Primary grade children are interested in stories about heroes, the exotic and the long ago and far away. Primary curricula should concentrate on these topics rather than on the family, neighborhood and community.

A major problem afflicting the current social studies curriculum is the absence of thinking skill activities. Thinking skills is a contemporary catchphrase which has captured the imagination of the professional community. Thinking is an exercise of the human mind that is both ancient and challenging to educators because of the complexities involved in the thought process.

The social studies curriculum should prepare students to think critically and not just absorb information that is committed to memorization. Often when a subject is built on memorization children are doomed to failure or information is soon forgotten. The current curriculum tends to be rather narrowly focused in that it fails to venture beyond the most familiar. Much evidence points to the widespread teacher neglect of thinking skills in social studies activities. Many teachers limit their student's learning activities in social studies to commercially-prepared

worksheets and dependence on textbooks. These materials have a tendency to foster teaching and testing activities that do not encourage the use of thinking skills.

In the writer's school, it was found that third grade students use the knowledge and comprehension levels from the cognitive domain of Benjamin Bloom's Taxonomy of Educational Objectives (Bloom, Englehart, Furst, Hill and Krathwohl, 1956) when completing social studies activities. The students are exposed to these lower level questions when presented with commercially-prepared worksheets for social studies.

From the experience of this writer and through conversations with other third grade teachers in the writer's school, it was obvious that they were unhappy with the way they were teaching social studies and wished to make changes. The teachers were motivated to examine their teaching effectiveness in order to improve the quality of teaching thinking in social studies.

The importance of cognitive development has increased over the years, making students' performance on measures of higher-order thinking critical. When tested on the Iowa Test of Basic Skills, the scores indicated that third grade students scored near the 50th percentile.

If the situation were improved, third grade students would become better critical thinkers in social studies.

Briefly stated, this practicum addressed the problem that third grade students used knowledge and comprehension levels of thinking skills when completing social studies activities.

Problem Documentation

This writer analyzed twenty commercially-prepared worksheets that third grade students completed for social studies activities. The results indicated that third grade students were answering questions from the two lowest levels of Bloom's Taxonomy--knowledge and comprehension (Bloom et al. 1956). In most cases, the students were simply regurgitating facts that were presented by completing fill-in-the-blank, true-false, and multiple choice questions. Most worksheets asked students to recall specific facts about a skill while focusing attention on a particular piece of information. Children then decide on an appropriate response and indicate their answer with no thinking taking place.

Conversations with and a survey (see Appendix A) completed by the three third grade teachers indicated that they were unhappy with the teaching of social studies as it currently existed.

The writer also obtained from the principal the results from the Iowa Test of Basic Skills, Primary Battery, Form J,

Level B given in the spring of 1990. The results indicated that third grade students scored in the 53rd percentile on the visual materials test and in the 46th percentile on the reference materials test of the Work-Study portion. The total Work-Study score showed that third grade students scored in the 51st percentile.

The Work-Study tests assess students' ability to locate, interpret and use information from map-reading skills to interpreting graphic and tabular displays, skills that are necessary in the social studies curriculum.

Even though these results reflect an average ability of the students, the writer presumed that if the students were exposed to thinking skills instruction, the test results would be higher.

Third grade students were not tested in the spring of 1991 or 1992 due to the cost involved with purchasing and grading these tests, so test results are not available. In addition, the state mandates that only fourth grade student be tested annually.

This data documented the writer's belief that a thinking skills program for third grade social studies would make a substantial contribution to the students.

Causative Analysis

Several probable causes of the problem were considered.

The first probable cause is there is no critical thinking program in use for social studies. Three third grade teachers received limited training in the area of teaching higher-order thinking through attendance at two insevice workshops held in the fall of 1991, with the fourth third grade teacher joining the staff in August 1992. These workshops did not address the integration of thinking skills into the social studies curriculum.

A second probable cause is that there is no mention of critical thinking in the currently-used county social studies curriculum guide. In 1980, when the guide was written, thinking skills were not given as much emphasis as they are today. Teachers in grades one through three have access to the teacher's edition of a social studies textbook, but mainly depend on the ideas presented in the county guide for social studies activities. Two of the three third grade teachers completing the survey (see Appendix A) indicated that they made use of the curriculum guide and agreed that they do not believe it incorporates thinking skills.

Another possible contributing cause is the overdependence on commercially-prepared worksheets for social studies activities. Teachers purchase books of worksheets on a given social studies topic that are appropriate for third grade students and then provide

instruction, based on the information contained in the worksheets. Other instructional materials such as filmstrips, books, study prints and charts are used to supplement the worksheets. The writer believes that worksheets are used because they are easy to duplicate for whole-class use and can be graded easily and quickly by the teacher. Third grade students should be able to read social studies content through the use of textbooks, magazines and other literary sources. The use of worksheets is not actively involving students in the acquisition of higher-order thinking skills because they teach basic facts and ask children to recall.

The fourth probable cause is that the current social studies environment has not given third grade students the opportunity to explore their environment. The students have been confined to desktop learning during the completion of the worksheets with little time allocated for the completion of projects, reports and hands-on learning situations. One field trip a year is usually permitted. Although bulletin boards use social studies themes, they are mostly teacher-made from commercially-purchased materials or identical student- produced work.

Relationship of the Problem to the Literature

Our instructional practices have for too long ignored

the basic mission of education--to teach others how to learn. For a hundred fifty or so years, we believed that we could impart essential knowledge through conventional teaching for information alone.

Much of today's important content will come to life when examined in the context of thinking and decision-making, perhaps the single most important skills for children and adults of the 21st century (Farley,1990).

One major problem is that there is no critical thinking program in use. This writer found many reasons why thinking skills are not taught.

At all school levels, students are exposed to lecturing, reading textbooks, telling, questioning, quizzing and doing workbook exercises. Many educators assume that students will learn how to think merely by going to school and being exposed to these rituals (Maeroff,1981).

Goodlad (1984), in his nationwide study of schools, found little evidence of critical thinking and concluded that "preoccupation with the lower intellectual processes pervades social studies and science as well" (p.236).

According to Batcheller (1985) it takes much time and money to implement a critical thinking skill program. Teachers need to be involved in the design, development and implementation if there is going to be a successful program. These three phases take much time to plan and as many staff

members as possible should be in on the initial planning, since it is up to them as to how successful the program will become. Money needs to be spent investigating programs, preparing materials and compensating teachers for their efforts.

Grice & Jones (1989) conducted a survey of all fifty states to determine the status of thinking skills curricula. Of the forty-three departments of education that responded, only ten (approximately 23%) reported that thinking skills are mandated in their school curricula. Those states are Florida, Georgia, New Mexico, North Carolina, Rhode Island, South Carolina, Tennessee, Texas, Vermont and Virginia. Only one state, Iowa, has a proposal under consideration.

The results of a study conducted by Knight, Waxman & Padron (1989) with 141 third, fourth and fifth grade students from an urban elementary school in the Southwest revealed that students are not using cognitive strategies to solve critical thinking problems in social studies. Elementary school students may need to learn how to use specific cognitive strategies in order to enhance their critical thinking ability.

Solomon (1987) indicated that social studies offers many possibilities to promote thinking skills at the elementary level, but it is rarely used. Among the reasons given for this low priority is the short amount of time (20

minutes) spent on social studies when compared to math and reading (40 minutes and 95 minutes) and then the time set aside is rarely prime time. There is also little time spent on inquiry methods.

Brophy (1990) cites the "back to basics" movement with its emphasis on the teaching and testing of basic reading and mathematics skills with reducing the time allocated to social studies. Thus social studies was virtually pushed out of the curriculum in many elementary schools.

In the writer's school there is no mention of thinking skills in the social studies curriculum guide. The third grade teachers are using a county social studies curriculum guide that was written in 1980 by a group of 18 K-12 teachers and supervisors. It does not address the teaching of thinking skills in this area and is considered by this practicum writer to be outdated and in need of major revision.

According to Beyer (1985) there is a general lack of critical thinking in the social studies. He feels that the nature of critical thinking is not clearly defined nor agreed upon by social studies educators. He also finds most thinking skills have been mislabeled or imprecisely defined.

Most elementary teachers are not acquainted with the purposes and goals of social studies, are dependent on textbooks for content and are inclined to plan on the basis

of convenience to themselves or students interest in activities rather than on the basis of the intended student outcomes (McCutcheon, 1981).

Teachers have found that many social studies skills can be covered through the use of commercially-prepared worksheets. Much of what teachers do under the guise of skills teaching is really skills testing (Beyer, 1984). The most common kinds of questions used to teach thinking skills appear on printed worksheets or at the end of textbook chapters. Although these questions might appear to require students to use specific thinking skills, they are just as likely to encourage students to copy from other students or to guess.

According to McKee (1988), many attempts have been made to provide alternative curriculum strategies, but most teachers still rely on lectures, worksheets or textbook questions for fear of being labeled an "overachiever" by colleagues or criticized by their administrators for not following the course of study.

Costa (1985) presumes it anti-ethical to reduce thinking to a selection of multiple-choice items or to express mental functioning to a paper-and-pencil format. He believes there are many innovative methods to assess growth in thinking abilities, Among them--writing samples, materials manipulation, open-ended multiple answer questions

and portfolios.

Reyes (1986) studied five elementary social studies textbook series and found that the majority of evaluation items at the end of a chapter or end of a unit focused on content, rather than on the process evoked by higher-order questions. He found that the textbook publishers did not deliver material that develops strong critical thinking.

The majority of educational products that are available today are incapable of contributing to the achievement of excellence in education, believes Komoski (1985). He cites the textbook as "a 19th century invention that has failed to evolve effectively during the 20th century" (p.34) and finds only a few educational products that deal with the development of critical thinking skills.

Solomon (1987) found that most written tests did not appear until fourth grade and focused mainly on memorized information. The most common questions were multiple-choice, true-false, matching and fill-in-the-blank rather than essay questions. He believes that the use of social studies to promote thinking skills is not being realized.

Beyer (1984) suggests that commercially-prepared or teacher-made tests that use multiple-choice items may be the least useful way to measure students' thinking skills.

Many educators have found that social studies textbooks

have a way of limiting both the child's comprehension of subject-matter and use of language (Clark, Sears & Smyth, 1990). They believe that textbooks "fail to foster the depth of understanding that is essential in the achievement of social studies goals" (p.13).

Most social studies textbooks provide teachers with a framework, a logical sequential program that is planned with each activity building on the foundation provided by the previous activity. But on the other hand, textbooks are also guilty of not defining the skills they purpose to teach and fail to relate learning activities to specific thinking skills (Beyer, 1984).

The social studies classroom environment has been one in which the students are passive learners. According to Williams & Kamii (1986) the children's mental action can either be enhanced or hindered by the social context of the classroom. They advocate the replacement of worksheets with environments that offer opportunities for children to think as they manipulate objects in hands-on activities.

In many cases, teachers have disregarded children's interests and imaginations when planning social studies activities and do what they feel needs to be done. Clark, Sears & Smyth (1990) feel that this is a major fault of some social studies programs.

CHAPTER III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS

Statement of Goal and Expectations

The following goal was projected for this practicum: Third grade students would exhibit critical thinking skills of application, analysis and synthesis in social studies.

Behavioral Objectives

The implementation of this practicum attempted to accomplish the following objectives:

1. Sixty-three out of 78 third grade students will score "satisfactory" on a teacher evaluation checksheet of written social studies work placed in student portfolios.
2. Seventy out of 78 third grade students will complete two social studies projects using cooperative learning and think-pair-share techniques with a grade of "satisfactory" on both a student evaluation checksheet completed by the teacher and a pupil self-evaluation form.
3. Twelve third grade students will participate in an invention fair by submitting working models or diagrams

of their invention to the practicum writer and exhibiting them in an invention convention held at the school.

Measurement of Objectives

Teachers evaluated objective once every six weeks by assessing student portfolios with the teacher checksheet (see Appendix B). Work placed in the portfolio included work done on sequence charts, Venn diagrams, mapping and webbing activities as well as reports and projects. Using a four-point scale, with four representing almost always to one representing rarely, teachers indicated how well the student achieved that objective. The writer anticipated that 63 out of 78 students would receive a "satisfactory" rating on the portfolio work.

Students were required to participate in two social studies projects for objective two.. Teachers evaluated each of the projects using a teacher evaluation checksheet for projects (see Appendix C) which again utilized a four-point scale to indicate the degree of proficiency that the students used thinking skills in the completion of their project.

Another component of this objective was a pupil self-evaluation of their project (see Appendix D). Students answered six questions concerning the steps taken to complete the project to the conclusions they reached. It was

anticipated that 70 out of 78 students would receive a "satisfactory" rating on these projects.

Students were given the opportunity to participate in an invention fair for objective three. Each participant kept a log of his/her progress in developing the invention, which was a model or a diagram, that was submitted to the teacher for examination. Participation of twelve students in the invention fair was anticipated for this objective.

CHAPTER IV

SOLUTION STRATEGY

Discussion and Evaluation of Solutions

The goal of the social studies educator, according to Parker (1991) is to help the student develop a rich network of understandings of a limited number of topics. He cites five essential learnings of the social studies curriculum: the democratic ideal, cultural diversity, economic development, global perspective and participatory citizenship. (p. 1)

Tye and Tye (1990) see global education as a way to see how individuals and groups view life differently as well as having common needs and wants. In this practicum the writer has attempted to incorporate many of these learnings into the curriculum that she and others have developed.

Many believe that thinking skills should be integrated into an exciting subject area such as social studies. Dewey (1916) was among the first to address the improvement of thinking as an objective of social studies teaching. He writes, "the sole direct path to enduring improvement in the methods of instruction and learning consists in centering upon the conditions which exact, promote and test thinking" (p. 170).

Lucas (1983) defines critical thinking as an "umbrella" term that comprises many kinds of thinking--problem solving, decision making, creative, divergent, convergent and logical thinking. She believes that critical thinking can be taught to kindergarteners through adults as a separate skill or integrated into a content area (p. 1).

During the early 1980s, a period known as the reform era in American education (Presseisen, 1986, p. 12), many reports were issued that criticized American students as poor thinkers. One report issued by the National Science Board Commission (1983) states:

> We must return to the basics, but the 'basics' of the 21st century are not only reading, writing and arithmetic. They include communication and higher problem-solving skills and scientific and technological literacy--the thinking skills that allow us understand the technological world around us. (p. 12)

The development of thinking skills is a goal of education. Children must learn as soon as possible how to become responsible thinkers and gain the tools by which they can probe into and take charge of their own mental processes. Thinking is a series of subskills that must be practiced and applied to new situations if any degree of proficiency is to be achieved (Paul, Binker and Charbonneau, 1986; Bowman, 1988). Neither textbooks nor teachers teach critical

thinking in the social studies context, but Beyer (1985) agrees that we must provide systematic instruction in order to prepare students for the 21st century.

According to Raths, Wassermann, Jonas and Rothstein (1986) social studies seems to be the logical place to emphasize higher-order thinking skills. But most social studies textbooks have only occasional activities that require the use of higher-order thinking skills and most of these are located at the end of the chapter.

But one problem that American education has according to Kozol (1973) is "nonstop forward motion" which is the tendency to move from one educational goal to another, without meeting previous goals (p. 6).

Nickerson (1981) wants educators to be wise enough to select from four types of thinking skill objectives they want students to be able to do and incorporate those skills into their curriculum. His four objectives are abilities, methods, knowledge and attitudes. Abilities refers to what educators want students to be able to do, the methods are the strategies or procedures that will be used to carry out the task, the knowledge is the facts, concepts or principles they want students to understand and the attitudes are the views or perspectives they want students to adopt.

Beyer (1983) is in agreement with Nickerson in that only a few (3-5) thinking skills per grade level should be

introduced, but that those skills should be part of a multigrade, sequential skill program. But it is not always easy to determine when children are developmentally ready for a skill or in what order the skills should be taught. In presenting the material, teachers should reinforce previously taught skills and should build on thinking skills introduced in previous grades as well as provide repeated practice and reinforcement of what has been taught in one content area and relate it to other curricular areas. If many thinking skills are introduced haphazardly at various grade levels there will be little success in teaching students how to think.

Elementary children can benefit from early exposure to varied thinking processes and different media presentations in at least two to three hours of instruction per week. Costa (1985) believes what is most important is that the student develop competency in essential skills in the early years of schooling and then, as the child advances through middle and high school, is introduced to more complex content matter in multiple content areas. Studies also show that demonstrable change in thinking skills can occur only after a two-year period of consistent and sustained instruction. They are not overnight cures or quick fixes, but require a length of time for students to develop competency in using them.

When teachers attempt to teach too many skills in too

little time it may lead to a skills overload (Beyer, 1984). What should be more important is to emphasize the quality of the teaching rather than the quantity.

de Bono (1983) finds merit in teaching thinking skills through content material. He believes it is like killing two birds with one stone, since it is easier to introduce thinking into the curriculum because the material must be covered.

Children in the primary grades can benefit from instruction in history if materials are presented primarily in the form of vivid narratives about real people and are organized around such concepts as bravery, cowardice and victory (Marshall, 1985).

Jay (1986) believes that teachers should ask students to compare and contrast, categorize, rank order, predict, infer, justify or support their answers. In doing this, they are stimulating greater thinking than if the student were merely reciting facts or filling in the blanks on a worksheet. Higher-order thinking signifies challenge and expanded use of the mind wheras lower-order thinking signifies routine, mechanistic application.

Teaching thinking skills may take three forms: (a) the subject-matter approach; (b) the integrated approach; or (c) the separate and integrated approach (Grice & Jones, 1989). Of these three, they believe that the integrated

approach is the most feasible because it fits most easily into existing curriculum programs and "not only enables students to acquire thinking skills but enables them to transfer those skills to other courses" (p. 340).

Researchers have come up with many problem solving techniques that can be used to teach thinking skills. Cohen (1971) believes that critical thinking is the development of logical reasoning patterns. Problem solving uses basic thinking processes to resolve a known difficulty. To resolve this difficulty calls for a person to assemble the facts, determine what additional information is needed, and then suggest alternative solutions. Lastly, creative thinking is the use of basic thinking skills to develop or invent novel ideas or products.

Ayers (1989) designed a creative problem solving strategy that includes the following steps: (a) identify the problem; (b) gather information concerning the problem; (c) write many different problem statements; (d) brainstorm possible solutions to the problem; (e) find solutions; and (f) justify the solution and develop a course of action.

Beyer (1983) suggests four steps in an effective skill teaching strategy. The first stage is readiness whereby teachers engage students in using the skill as best as they can to help create the "need to know" (p. 46). The second stage is the introduction to the skill using specific

instruction for providing examples of how the skill is used. The teacher then provides reinforcement through repeated practice by using explicit instruction and review. Finally the teacher extends the skill beyond the content in which the skill was introduced and practiced.

The use of cooperative learning has been found instrumental in promoting thinking in social studies. It provides a good deal of structure as well as rewards or recognition based on group performance. The cooperative activities supplement, but do not replace, direct instruction. Individual accountability is also a factor in that the groups success is dependent upon all members contributing to the task at hand.

Both Slavin (1986) and Johnson and Johnson (1987) found that cooperative learning improves student achievement and increases the social skills of students. Teachers must communicate to students the need for social skills, define and model these skills and have students practice them over and over again until the skills are fully integrated into their behavioral repertoires. Cooperative learning makes life more pleasant for teachers as well as for students. Students enjoy working together and their enthusiasm makes teaching more fun while increasing their achievement.

Johnson, Johnson, Holubec and Roy (1984) found that students who work cooperatively in groups make better use of

higher reasoning strategies and greater critical thinking competencies than does individual or competitive learning situations.

Cooperative learning is an important element of global education. Becker (1990) gives credence to cooperative learning and stresses collaboration and teamwork through the use of interactive learning opportunities.

The elementary social studies program has been criticized by Hanna (1963) as being nothing but an ill-structured collection of facts and skill exercises that do not promote thinking.

Elliot, Nagel and Woodward (1985) offer encouragement to teachers and curriculum specialists to develop their own curriculum and materials locally. This locally-produced curriculum should be supplemented with an array of local resource and audiovisual materials. It would better meet the needs of the students in the community and address the direction and skills they wish the curriculum to take. Teachers would therefore have ownership in the materials they are using.

Kliebard (1987) cites the natural course of child development as the basis for the design of school curriculum and instruction. The content taught at a particular grade level should be keyed to the interests and learning needs of the students. But most schooling is designed to serve as a

mechanism for preparing children for adult roles.

In developing units that integrate thinking skills into the social studies curriculum Jarolimek (1986) identified a number of skills that should be practiced: (a) making comparisons; (b) developing hypotheses; (c) using evidence to test hypotheses; (d) planning how to study a question or problem; (e) getting data from a variety of sources; and (f) predicting possible outcomes. Each of these subskills is a very important component in the process of thinking.

Staff development activities are an important factor that must be included if a thinking skill program is to be successful. Findings from Tye and Tye (1984) show that teachers are usually isolated from one another and do not often come together to discuss curricular and instructional changes. According to Paul et al. (1986) by providing teachers with the scaffolding for carrying out the process and examples of its application, it opens the door for continuing development of critical thinking skills. Teachers gain more expertise and success in critiquing their day-to-day practice of teaching. They become more reflective on what they are attempting to do.

Staff development is vital to a thinking skill program because it involves a change in methodology and approach (Batcheller, 1985). The program must be thoroughly worked through if change is to be meaningful and the curriculum not

just sitting on a shelf or desk unused. It is the kind of program a district should want implemented in every teacher's classroom.

McKee (1988), in a three-year, joint school district-university project involving thinking skills in social studies classes, found that teachers tended not to integrate new approaches in classroom instruction, even though they received intensive training. Teachers still relied on lectures, recitation, worksheets or text questions. This is just one problem that can occur when teachers are afraid to try something new or out of the ordinary.

Research on how people react to innovation shows four distinct reactions. Rogers (1962) cites "innovators" as teachers who design the plan and "early adopters" as people who jump right in. On the opposite side are the "early majority" who want to become better acquainted with the innovation and the "late majority" who would rather wait to see how things progress before becoming involved or totally resist or reject the change completely.

In planning critical thinking staff development Paul et al. (1986) emphasize that it should be action oriented and examine and assess what is being introduced in the classroom daily. Teachers need to be actively involved in hands-on activities rather than sitting passively listening to a speaker. These activities should be something the teacher

can implement immediately in the classroom and receive feedback from the students so the students can learn as quickly as possible how to become responsible for their own thinking.

Another factor to consider in developing a thinking skills program is the teacher's use of wait-time and higher level questioning techniques. Hughes (1986) and Shaw and Cliatt (1991) advocate that teachers use wait-time after asking a question and before any responses, to allow students time to think. When teachers learn learn to accept silence for a short time, it communicates to students that they are expected to think and the quality of their response is more valued than the speed of their response. In addition children produce more and higher-quality answers.

It has been suggested that teachers use open-ended questions to stimulate the thought process, rather than asking closed questions that can be answered by a simple yes or no. The use of open-ended questions provides an intrinsic value by showing how students respond when they are challenged to define a problem and deal with it. A broad, open question has a variety of correct or appropriate responses and shows the students' ability to apply what they have learned to new situations (Hughes,1986; Thomas,1989).

Hughes (1986) also found a relationship between the students level of comprehension and the types of questions

asked by their teachers. Students who were uniformly asked high-level questions scored significantly higher in social studies achievement than those who were asked low-level questions.

Finally to be considered is the establishment of a supportive social studies environment for third grade students. A consistent observation is that schools are dull places in which many students are rarely challenged to use their minds (Goodlad, 1984). Beyer (1983) believes that teachers must provide a supportive learning environment. They should conduct lessons that provide activities where children can compare, analyze and judge evidence, as well as invent and discover relationships.

According to Shav and Cliatt (1991) teachers should adapt any new skills to be taught to the children's interests and ideas. This not only motivates the children, but increases the pace of their learning and extent of mastery.

Collins (1991) believes that teachers can enhance the time they spend in the classroom on high-level thinking by identifying teaching behaviors that encourage students to question, concentrate, imagine, innovate and solve. If teachers reiterate these behaviors they would help students develop the ability to create their own individual ideas and satisfy their curiosities.

Presseisen (1986) observes that the teacher has a

two-part role. The main role is to help the child think him or herself and second, to construct an environment that is supportive of interactive classroom exchange. This can be implemented by using various media and materials that reach the different learning modalities that need to be served in the classroom.

The role of the teacher is very critical in the thinking classroom. Nickerson (1981) believes that teachers have to have a sense of curiosity and be inquisitive if they are going to produce inquisitive, information-seeking students. By developing a teachers' conceptual understanding of what thinking is helps improve that teacher's instruction. There are certain behaviors that are exhibited by students and teachers in a thoughtful classroom. These include confidence, a thirst for reasons as well as a willingness to take a risk. It has been proven that students learn best from what teachers do rather than what they say. Students who have mastered thinking skills have worked with teachers who have introduced a few skills, taught them step by step, demonstrated how to use them within the content areas and with special projects and then provided the students practice a few times during the year.

Description of Selected Solutions

In this practicum, the writer believed the students

could be taught a few (3-5) thinking skill strategies. These skills would be practiced in other areas of the curriculum, such as language arts, science, and math, so that the students can become proficient in using these skills and can integrate what has been learned into other areas (Beyer, 1983).

Many (Ayers, 1989; Beyer, 1983; Jay, 1986) believed that the use of such problem solving techniques as the assembling of facts and the determining of information that is needed would be useful to help students understand social studies material. In higher-level thinking skills students would take what they know and change the information from one form to another and interpret or compare it to other information. Students would also examine and interpret whole-part relationships and then synthesize the information and do some creative thinking.

Another factor that teachers would try would be cooperative learning in as many situations as possible within the social studies context (Johnson & Johnson, 1987; Slavin, 1986). If teachers used cooperative learning, students would be active, constructive learners, would be interested in social studies activities, would have greater opportunity for peer interaction as well as enhanced opportunities for social studies thinking.

Since Elliot et al. (1985) advocate teachers to develop

their own curriculums, a team of third grade teachers, composed of the practicum writer and two teachers from the practicum setting, developed and published six social studies units. These six units integrate thinking skill activities into the social studies curriculum and were distributed to the in-service participants during the training sessions.

Many teachers are not professionally trained to teach thinking skills. This should not be a reflection on the teacher's intelligence or professionalism. It makes sense to suggest in-service training sessions to help other third grade teachers implement thinking skills into their social studies curriculum. The in-service training would clear up ambiguities and misconceptions teachers may have about thinking skills and how it ought to be taught. It also encouraged teachers to be more circumspect to the use of thinking skills. Therefore, staff development activities would be action oriented in order for teachers to have a greater understanding of what is expected (Paul, Binker & Charbonneau, 1986). Before students can be taught to think critically, teachers must understand the thinking process. Therefore, the writer offered to present two thinking skills in-service workshops to third grade teachers in another elementary school in the county.

Teachers also made use of wait-time and higher-level questioning techniques when asking students questions.

Hughes (1986), Shaw and Cliatt (1991) and Thomas (1989) all conclude that students give better answers to questions when they are given time to think before being called upon to respond with an answer. When teachers use higher-level questions, they encourage students to think.

Lastly the social studies environment would be improved through the use of bulletin boards, interest centers, displays, and by providing hands-on learning activities (Shaw & Cliatt, 1991). When teachers have inviting social studies classrooms, students get excited about what they are learning.

Report of Action Taken

The major objective of this practicum was to enhance the critical thinking skills of third grade students by teaching the skills of application, analysis and synthesis in the social studies curriculum. The solution strategy for this practicum began after receiving approval in mid-July 1992 to begin the implementation phase.

Before the practicum was implemented, each third grade teacher was asked to complete a social studies practicum survey (see Appendix A).

The writer was able to secure all necessary supplies and materials through personal funds which included duplicating

paper, file folders for portfolio work, loose leaf binders for unit work as well as supplemental materials on inventions, celebrations around the world and map and globe skills. The school media specialist and principal were instrumental in securing additional funds to purchase supplementary reading materials, three Lego Dacta kits, a young inventors kit and video laser disc and VCR programs on simple machines and inventions. Free materials in the form of maps and brochures about the state were obtained from the local visitor's center, as were maps from a nearby major amusement park.

The practicum was implemented in two phases. The first phase, covering eight weeks, was used to develop six social studies units that dealt with (a) maps and globes; (b) history of air and space transportation; (c) Native Americans; (d) celebrations around the world; (e) patriotic symbols and (f) the writer's state. A team of three third grade teachers--the writer and two other team members met approximately five hours per day, three days a week for four weeks to write these units. The units were then coordinated with the school calendar and the practicum calendar. An additional four weeks was spent on the refinement, printing, and compilement of the units into loose leaf binders for dissemination. The teachers felt a sense of ownership and commitment to this project because they would be the ones

using the materials and felt that a significant change would take place in the teaching of social studies at the third grade level.

During this time the writer also met with the principals of three elementary schools where she had hoped to conduct in-service training sessions on integrating thinking skills into the social studies curriculum. Only one principal indicated an interest due to time and other programs being implemented in their schools.

The second phase of this practicum began on September 8, 1992 with the opening of a new school year. Student instruction involved 78 third grade students receiving social studies instruction by the practicum writer with assistance from the additional three third grade teachers approximately 2 1/2 hours per week. Throughout the practicum teachers exposed students to higher-level questioning techniques using Bloom's taxonomy and made use of wait-time when asking questions on a daily basis in most areas of the curriculum.

The first area of study presented to the students was a five week unit on map and globe skills. Students received hands-on experience with globes, topographical, physical, highway and weather maps. The skill of synthesis was taught through the use of Venn diagrams. Pupils compared and contrasted maps and globes. Analysis skills instruction took the form of diagram preparation of various maps. Students,

in small cooperative groups, produced diagrams of the classroom and school. A large map of the community surrounding the school was produced on a wall outside the cafeteria. All roads were labeled and landmarks such as stores, restaurants, churches, post office, fire department and rescue squad were placed in their appropriate places on the map. Students decorated a 2" x 3" card to look like their homes which were also placed on the wall. A beautiful map of the school community was the finished product which drew much comment from parents attending the annual back-to-school night. Each child also produced a map of his/her backyard at home that included a map key. Using all the information the students learned about maps and diagrams, each child drew a diagram of a dream room they would like to live in. The charts, maps and diagrams were placed in the student portfolio for future assessment.

The second unit of study encompassed the history of air and space transportation. The history of flight from the Montgolfier balloon to the X-15 was introduced in the form of a sequence chart. Each form of air transportation was then presented in dètail through the use of supplementary reading materials, materials from the National Air and Space Museum and art projects. Students participated in such art projects as paper mache hot air balloons, and styrofoam meat tray Wright Brother Flyers. Venn diagrams were used to compare

and contrast various modes of air transportation. Students wrote advertisements to promote interest in a fictitious air line. At the midpoint of this unit teachers evaluated the work placed in student portfolios using the teacher evaluation checksheet (see Appendix B). Approximately 70 students scored "satisfactory" on this unit of measure of student work.

The last three weeks of this unit were devoted to the history of space exploration. Through the use of sequence charts and Venn diagrams students studied the flight of Alan B. Shepherd (first man in space) through the Gemini and Apollo flights, Skylab and the space shuttle. Students read a story about Sally Ride, the first American woman in space. A field trip to the National Air and Space Museum in Washington, DC was taken by the students. After this on-site visitation, the students wrote stories about what they thought it would be like to be an astronaut in space.

As a culminating activity, students were placed in small cooperative groups of 3-4 students to design a new plane, using all the information they had gleaned from their study. After drawing their new planes, materials were gathered and a model of the plane was constructed. Students took their planes outdoors and performed a "test run." Many of the planes performed quite well. At the conclusion of this project teachers completed a student evaluation checksheet

for projects (see Appendix C) for each group, while the students completed a pupil self-evaluation form (see Appendix D). Many of the students had difficulty completing this assessment due to the nature of the questions asked and poor explanation by their teachers of what they were to do. Approximately 62 students scored "satisfactory" on this assessment.

Our state was the next unit studied by the students. Teachers presented a brief history of the state using a timeline to sequence important events. Each of the three different regions were discussed as to the products and occupations, major cities, and various physical features such as rivers, mountains and valleys. Students completed books with pages on the state bird, flower, seal, products and the names of the presidents of the United States from our state. Venn diagrams were used to compare and contrast the different regions of the state. The final activity was done in cooperative learning groups. Each group selected a large city to research using the almanac, encyclopedias, and reading materials from the visitors center. Reports were written and presented orally in each class.

Celebrations around the world was a multicultural experience wherein children were exposed to various holidays celebrated during the winter months by cultures they were least familiar with. The emphasis was on people-how they

eat, live and entertain themselves through music, art and literature. Among the countries studied were Germany, Austria, France, Italy, Poland, Denmark, Sweden, England, Mexico, Brazil and the United States. The music teacher taught various songs and games to the children during their weekly music class. Again Venn diagrams were used to compare and contrast celebrations. Students wrote stories comparing how their family traditions were connected to festivities celebrated in other parts of the world for synthesis. It was hoped that a multicultural celebration could be held at the conclusion of the unit, but due to lack of time, finances and kitchen facilities was not held.

A second review of portfolio work was undertaken during week 21 of the practicum. Of the 78 students, 53 received a "satisfactory" rating on the teacher evaluation checksheet (see Appendix B). Work assessed included student written stories about being an astronaut, reports on large cities in the state and various Venn diagrams on areas of the state, space flights, and different holidays celebrated between two countries.

A four week unit on Native Americans was the next area of study presented to the students. Children studied tribes from each of the four geographical areas of the United States--Eastern Woodlands-Iroquois; Plains-Sioux; Southwest-Navajo and Northwest-Chinook. During the course of study the

homes, foods, clothing, transportation and occupations were examined. Information was obtained through the reading of supplementary storybooks and viewing filmstrips. The practicum writer contacted tribal officials from two tribes in the state to be guest speakers for the classes, but due to the distance and their advanced ages were unable to come.

Students made various art projects as each area was studied. The art teacher participated in this unit by assisting students in the making and firing of clay pots. These pots were later put on display in the school showcase. Students also developed an Indian design that was impressed onto a miniature shirt or dress. Analysis skill was furthered by student preparation of Venn diagrams comparing and contrasting the various tribes in the four areas. Culminating this unit was a cooperative learning venture that had student groups researching a particular tribe as to homes, food, clothing, occupations, and transportation, writing a report, then constructing a model village to synthesize the learning that had taken place. Student work on this project was assessed by the teachers using a student evaluation checksheet for projects (see Appendix C). Sixty five pupils received a "satisfactory" rating on this assessment. Students also completed the pupil self-evaluation form (see Appendix D) with not as much difficulty as the previous time it was administered. Teachers explained

the assessment form in a much better manner. Approximately 67 students received a "satisfactory" on this instrument.

A third review of portfolio work was undertaken at the conclusion of week 28. Fifty six students received a "satisfactory" rating on the teacher evaluation checksheet (see Appendix B).

Succeeding the unit on Native Americans was a three week unit on patriotic symbols and a one week unit on famous Black Americans. Among the symbols discussed was the flag, the eagle, the Declaration of Independence and the Constitution of the United States, the national anthem, the pledge of allegiance, Uncle Sam, the Statue of Liberty and the Liberty bell. Students made a book of symbols incorportaing various art projects that reflected these symbols, along with information about each symbol. Various supplementary materials were available for student use concerning the presidency, the White House and different flags of our country. Stories about the Constitution and the Statue of Liberty were read to the classes. Analysis skills were tested using Venn diagrams to compare and contrast various symbols. After studying the meaning of the flag, students designed their own flag that was representative of things that they liked to symbolize themselves.

The final weeks of the practicum were spent engaging the students to beome creative thinkers. The teachers integrated

the study of simple machines with the study of various inventors and their inventions. Students studied how various machines worked (what simple machines were used). The school media specialist met with each class to do a video laser disc presentation on simple machines. She also secured some funds to purchase a six hour video tape series on inventors and their inventions.

Students then looked around their home or school for things that could be improved or could make a job easier. Students kept notes on their findings, then brainstormed on things they could do to improve or change it. Classroom activities with various materials fostered student thinking and creativity. Lego Dacta kits were used as well as assorted junk articles. Children were given three weeks to work on their inventions which could be an actual model or a diagram drawn on large construction paper. Students kept a log of their work on the project that was turned into the teacher. Projects were due the last week of the practicum. An invention convention was held in the school cafetorium with all children who participated exhibiting their invention. The second grade students were invited to view the exhibits. The third grade students explained how their inventions worked and why they developed them as the children passed. Some very ingenious inventions were created such as a Little People's Umbrella that required no hands to hold, a

solar powered personal desk fan, a flashlight pencil, and glow in the night tennis shoes. Sixty students participated in the invention convention and each received a certificate of achievement for their efforts.

Each student also selected an inventor or invention to research using the encyclopedia and supplementary reading materials to write a report and give an oral presentation to the class. Included in the written report was a webbing activity that listed all the uses of that invention and a diagram with all the parts labeled for the invention.

Portfolio work was assessed for the last time at the conclusion of the practicum implementation. In this assessment 57 students received a "satisfactory" rating on their work. Copies of the student evaluations were filed and the writer used all four sheets to arrive at an average score. Fifty-nine students scored "satisfactory" out of 78 on the final assessment of portfolio work.

Teacher in-service was one component of this practicum. The writer had planned to present three-one hour workshops at another elementary school in the county that employs five third grade teachers. After meeting with the schools' principal, he preferred that two sessions of one and a half hours be held in February and March. The practicum writer prepared materials for five participants. Upon arrival at the school only three teachers were in attendance. The two

other teachers had previous commitments and could not be present. The binders with the units were left for the grade leader to disseminate to them.

The first in-service session was held in early February, 1993. Teachers were given the units on map and globe skills, our state, and Native Americans in a loose-leaf binder. The purpose and goals of the practicum were explained as were each of the units. The writer outlined the use of sequence charts and Venn diagrams to teach analysis and synthesis skills in the social studies curriculum. In discussing cooperative learning, it was found that two of the three teachers have used this technique, but mainly in the areas of math and science. The writer felt that the session was very productive, even though only three teachers were present. The three teachers were asked to peruse the materials in a more thorough manner and note any questions or suggestions for the next session.

The next session was held in March 1993. The same three teachers were in attendance. Units on patriotic symbols, history of air and space transportation and celebrations around the world were distributed for placement in binders. A short discussion was held on the previous session. The teachers were very appreciative of the materials and the time it took to plan the units. Some suggestions for additional resources and methods were shared. The writer commented on

the three units shared that afternoon as well as alternative assessment procedures. A sample portfolio of student work collected from the beginning of the year was shared with the group. The portfolio contained Venn diagrams, sequence charts, maps and student writing samples. The use of higher-level questioning techniques using Bloom's Taxonomy of Educational Objectives for the Cognitive Domain was discussed. Handouts explaining each of the six levels of thinking were distributed along with a process/product chart of activities for each level. The teachers felt this chart would be very helpful in delinating activities for each level. The materials were left for the two absentee teachers. The writer found the opportunity to meet and share with her colleagues at the other school to be one of the most beneficial parts of the project. Teachers have little time to "network" with their peers to discuss their experiences.

At the conclusion of the two sessions teachers were asked to complete an in-service participant form (see Appendix E). The practicum writer tallied the points from each evaluation form returned to her and then divided the totals from the number of forms returned. Forms from the three participants were returned within one week of the last session held at the school.

CHAPTER V

RESULTS, CONCLUSIONS AND RECOMMENDATIONS

Results

The writer believed that thinking skills should be integrated into an exciting subject as social studies. A major problem affecting the social studies curriculum in the writer's school was the absence of thinking skill activities. Teachers were unhappy with the teaching of social studies as it currently existed. Among the contributing causes were the lack of a critical thinking program, no mention of critical thinking in the county social studies curriculum guide, an over-dependence on commercially-prepared worksheets and the lack of student opportunities to explore their environment.

The solution to the problem was to stress thinking skills in social studies activities through the teaching of a few (3-5) thinking skill strategies, problem solving techniques, the use of cooperative learning, wait-time and higher-level questioning techniques. Teachers developed their own curriculum through the writing and publishing of six social studies units which were taught to the students.

The goal of this practicum was to stress the critical thinking skills of application, analysis and synthesis in third grade social studies activities.

There were 78 third grade students and four teachers involved in the practicum. Enrollment was stable throughout the implementation period with only one student moving away. An increase in student enrollment at the second and third grade levels during the summer of 1992 necessitated the hiring of an additional third grade teacher.

The writer designed specific objectives to achieve the goal of integrating thinking skills into the third grade social studies curriculum.

Objective 1: Sixty three out of 78 third grade students will score "satisfactory" on a teacher evaluation checksheet of written social studies work placed in student portfolios.

The results revealed that 59 out of the 78 students received a "satisfactory" rating (majority of 3s and 4s) on the teacher checksheet of written social studies work. This work was evaluated each six weeks. All copies of the student's evaluation were filed and at the conclusion of the practicum the writer used all four sheets to arrive at an average score. Table 1 illustrates the results of this objective.

Table 1

Summary of Student Results for Objective 1

Student Portfolio Work

Total Number of Students-78

Rating Scale	1st 6 weeks	2nd 6 weeks	3rd 6 weeks	4th 6 weeks	Final Evaluation
4	17	20	15	17	17
3	53	33	41	40	42
2	8	22	19	19	17
1	0	3	3	2	2

Objective 2: Seventy out of 78 third grade students will complete two social studies projects using cooperative learning and think-pair-share techniques with a grade of "satisfactory" on both a student evaluation checksheet completed by the teacher and a pupil self-evaluation form.

Results regarding objective two revealed that 63 of the 78 students scored "satisfactory" on two teacher evaluation checksheets for projects. Many children had difficulty with the pupil self-evaluation form. Only 52.5 of 78 students scored "satisfactory" on this measure due to poor teacher explanation and the difficulty of the six questions. The

writer believed the students had never used such an instrument to evaluate themselves. When totals from both evaluations-teacher and student self-were averaged, 58 out of 78 students met this objective. Tables 2 and 3 provide a summary of the results for this objective.

Table 2

Summary of Student Results for Objective 2

Social Studies Projects-Teacher Evaluation

	Total Number of Students-78		
Rating Scale	Project 1	Project 2	Average
4	40	47	43.5 students
3	22	18	20 students
2	10	9	9.5 students
1	6	4	5 students

Table 3

Summary of Student Results for Objective 2

Pupil Self-Evaluation Form

Total Number of Students-78

Rating	Project 1	Project 2	Average
Satisfactory	48	57	52.5 students
Unsatisfactory	30	21	25.5 students

Objective 3: Twelve third grade students will participate in an invention fair by submitting working models or diagrams of their invention to the practicum writer and exhibiting them in an invention convention held at the school.

The results obtained from this objective revealed 60 out of 77 third grade students participated in the invention fair. One student relocated from the area. Students kept logs of their work which was turned into their teachers for examination. Many exciting inventions were created with over half of the projects being actual models. The projects were displayed in the cafetorium for viewing by second grade

teachers and students, as well as the participants themselves. The number of students participating from each class are summarized in Table 4.

Table 4

Summary of Student Results for Objective 3

Invention Fair Participation

Teacher	Number of Students in Class	Number of Students Participating
1	22	21
2	22	17
3	23	12
4	10	10
Total	77 students	60 students

Before the practicum was implemented the three teachers were asked to complete a social studies practicum survey (see Appendix A). Teachers were asked (a) what materials they use to teach social studies; (b) if they use the 1980 county social studies curriculum guide; (c) if this guide incorporates thinking skills; (d) if thinking skills are

included in their social studies curriculum; (e) if a specific thinking skills program was followed; (f) if they participated in a county thinking skill in-service session and (g) changes they would like to make in the way they teach social studies.

The results of this survey indicated that teachers were using a minimal amount of hands-on materials, but were very dependent on the use of commercially-prepared worksheets. Two of the teachers used the 1980 county soial studies curriculum guide and they did not believe that it incorporated thinking skills. All teachers responded negatively to the inclusion of thinking skills in their social studies program and followed no specific thinking skills program. All three teachers participated in a one day thinking skills workshop, but it did not address the area of social studies. When asked to make changes, they wanted more hands-on materials, less use of worksheets, a copy of the teacher's edition of the third grade social studies textbook and classroom sets of storybooks that deal with social studies content.

Teacher in-service training was an important component of this practicum. The writer presented two sessions of one and a half hours each to three third grade teachers at another elementary school in the county. Each teacher received a loose-leaf binder with three units that were

developed by the writer and two other teachers at the first session. The purpose and goals of the practicum were discussed as well as the three units. Also explained was the use of sequence charts and Venn diagrams to teach analysis and synthesis skills, along with samples of each. Three additional units were distributed at the second session, along with handout materials on higher-level questioning techniques using Bloom's Taxonomy of Educational Objectives for the Cognitive Domain and a process/product chart of activities for each level.

The three teachers completed an in-service participant evaluation form (see Appendix E) at the conclusion of the last workshop. Teachers indicated their level of acceptance of 15 statements concerning the in-service sessions using a scale of 1-5 with 5 indicating "strongly agree" to 1 "strongly disagree." All three teachers were very positive in completing the evaluation forms with all forms marked "strongly agree" for each statement.

Discussions and Conclusions

In reviewing the data collected during the implementation period of this practicum, all of the objectives were not met as stated. However, significant growth in thinking skills did occur.

One of the three practicum objectives was achieved with

much success. The writer was greatly surprised at the number of students who participated in the invention fair. Among the many possible causes for the success of this objective were (a) teacher enthusiasm, (b) student interest, (c) written directions to parents soliciting their assistance, and (d) three weeks advance preparation time.

The other two objectives, dealing with student portfolio assessment and project evaluation, were not met as stated, but were deemed successful. The writer feels there should of been closer monitoring of work placed in portfolios after the first evaluation period. One teacher fell behind in the work that she placed in the folders and at times was extremely difficult to keep her on the practicum timeline. Although the students had an enjoyable time completing the two projects in cooperative learning groups, when it came time to completing the self-evaluation form it was extremely difficult. The writer believes better teacher explanation of the questions would of given the students a better understanding of what they were expected to do. The purpose of self-evaluation is to help each student become responsible for his own accomplishment, for making a personal judgement as to hov well he/she has done and for deciding whether he/she is personally satisfied with his/her achievement.

The use of wait-time and higher-level questioning

techniques using Bloom's Taxonomy was found to be very instrumental in other curricular areas besides social studies. Students gave more thoughtful responses when engaged in using wait-time, rather than shouting out answers. Teachers asked more thoughtful questions, rather than the basic comprehension questions.

The writer was disappointed with the response of the principals concerning the conducting of in-service training in their schools. Even though the principals supported the basic premise, they felt the teachers were being inundated with too many other programs mandated by the school board. When the writer did conduct the in-service sessions at the one elementary school, the principal did not make their attendance mandatory. The writer feels that the three teachers who participated were grateful for the assistance because they each had less than two years experience at the third grade level.

The results of this practicum confirmed this writer's belief that the critical thinking skills of application, analysis and synthesis could be integrated into the third grade social studies curriculum. The need for teaching thinking skills was apparent from the studies reported in the research as well as from observation of the participating students.

Patrick (1986) noted that all students, regardless of

social class or presumed limitations in ability, have some degree of potential to think critically. He believes that this can be carried out by embedding thinking into the core curriculum required of all students. The writer believed that the purpose of social studies instruction was to provide activities which help learners develop knowledge, attitudes and skills necessary for the pratice of effective citizenship. Cliatt and Shaw (1987) cite the increasing number of problems in the world indicates the need for the fostering of thinking abilities to help solve the problems.

According to Parker (1991) learning is " a constructive activity, not a passive one, and while the teacher is the contractor, it is the students who are the laborers, the builders and assemblers of understandings" (p. 39). The students construct their understandings gradually, adding layer upon layer, yet continuing to elaborate, refine and sometimes rebuild previous layers.

deBono's (1983) dilemma, as well as the writers', is that there is not enough time to teach all the information that could usefully be taught. We may have to reduce the time spent on teaching information and focus instead on the teaching of thinking skills. Brophy (1990) believes that in the primary grades "not enough content is taught and that much of what is taught does not need to be taught" (p. 367). So it is up to classroom teachers to learn how to

develop and use curriculums that will help students acquire the skills necessary to become thoughtful citizens of the world.

Recommendations

1. It is recommended that collaboration take place between the second grade and fourth grade teachers to avoid duplication of instruction.
2. The number of social studies units needs to be increased or more spread out so that the entire school year is planned for.
3. It is recommended that evening hours be available for the invention fair so that parents can view the exhibits.

Dissemination

The practicum results were shared with the principal of the school and the three other teachers who participated in the implementation of the social studies activities. Each teacher was given a loose-leaf binder of the six units they helped prepare.

The writer may present the results at a county staff development workshop to be held during the 1993-94 school year.

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APPENDIX A

SOCIAL STUDIES PRACTICUM SURVEY

SOCIAL STUDIES PRACTICUM SURVEY

1. What materials do you use to teach social studies to your students? Please list.

2. Do you make use of the 1980 county social studies curriculum guide? ___ Yes, I do ____ No, I do not

3. If so, do you believe it incorporates thinking skills?
___ Yes, I do ____ No, I do not

4. Do you include thinking skills in your social studies curriculum?
____ Yes, I do ____ No, I do not

5. If you checked "YES" to #4, are you following (a) specific thinking skill program(s)? ____ Yes ____ No
Which one(s)? _____

6. Have you participated in any of the county thinking skill in-service sessions?
_____ Yes, I did _____ No, I did not
If so, which one(s)?

7. If you were to change the way social studies is taught at this grade level, what changes would you make and why?

APPENDIX B

TEACHER EVALUATION CHECKSHEET OF PORTFOLIO WORK

TEACHER EVALUATION CHECKSHEET OF PORTFOLIO WORK

Student's Name _____

Date _____

Teachers will circle their response using the scale provided upon examining work in student portfolio.

4 = almost always (good)
3 = usually (satisfactory)
2 = sometimes (needs improvement)
1 = rarely (unsatisfactory)

The student:

1. shows persistence in a thinking task.	4	3	2	1
2. shows that s/he can execute a thinking task.	4	3	2	1
3. can write a goal.	4	3	2	1
4. can select various methods.	4	3	2	1
5. can select data.	4	3	2	1
6. shows flexibility in thinking.	4	3	2	1
7. can approach a task from a number of angles	4	3	2	1
8. shows the steps s/he used when executing a thinking skill or strategy.	4	3	2	1
9. can identify missing data and locate it.	4	3	2	1
10. goes over papers and reports to check for accuracy, clarity and completeness.	4	3	2	1
11. applies knowledge and skills learned in area to another area.	4	3	2	1
12. uses precise language.	4	3	2	1

APPENDIX C

STUDENT EVALUATION CHECKSHEET FOR PROJECTS

STUDENT EVALUATION CHECKSHEET FOR PROJECTS

Name _____

Title of Project _____

Date _____

4 = almost always (good)
3 = usually (satisfactory)
2 = sometimes (needs improvement)
1 = rarely (unsatisfactory)

The student:

1. listens to directions before starting	4	3	2	1
2. asks questions to clarify the task	4	3	2	1
3. clearly defines the goals of the project	4	3	2	1
4. employs careful planning of the project	4	3	2	1
5. provides/secures supporting data	4	3	2	1
6. seeks alternative sources of data	4	3	2	1
7. applies and transfers previous learning	4	3	2	1
8. reconstructs events or ideas in sequence from readings and presentations	4	3	2	1
9. engages in questioning and discussing what they have read or heard	4	3	2	1
10. compares, contrasts and classifies based on readings and presentations	4	3	2	1
11. composes explanations and interpretations of ideas, events and actions	4	3	2	1
12. composes predictions and hypotheses	4	3	2	1
13. stays on task	4	3	2	1
14. makes creative use of materials	4	3	2	1
15. works cooperatively with other students	4	3	2	1
16. is able to compromise, when needed	4	3	2	1
17. completes project	4	3	2	1

Teacher Comments:

APPENDIX D

PUPIL SELF-EVALUATION FORM

PUPIL SELF-EVALUATION FORM

Name _____

Project Title _____

Date _____

1. Analyze the steps you took in completing this project.

2. Compare and/or contrast some of the things you found out in this project.

3. What conclusion did you reach about your project?

4. Hypothesize what would happen if-
the Wright Brothers came back to life today.(air & space project)
we live today like the Indians lived long ago (Amer. Ind. project)

5. Decide if this project was worth doing and tell why or why not.

6. I received help on this project from (names):

APPENDIX E

IN-SERVICE PARTICIPANT EVALUATION FORM

IN-SERVICE PARTICIPANT EVALUATION FORM

School _____ Date _____

Please answer the following statements by circling your response using the scale provided. Any additional comments would be appreciated. Return within one week to Gerri Westwood.

5 = strongly agree
4 = agree
3 = no opinion
2 = disagree
1 = strongly disagree
NA = not applicable

1. The objectives for each in-service were clearly stated at the beginning of the presentation.	5	4	3	2	1	NA
2. The in-service content was new to me.	5	4	3	2	1	NA
3. There was sufficient use of examples to clarify thinking skill strategies.	5	4	3	2	1	NA
4. The practicum writer encouraged the sharing of ideas and suggestions.	5	4	3	2	1	NA
5. Materials provided were carefully selected and well presented.	5	4	3	2	1	NA
6. The practicum writer discussed the units during each session.	5	4	3	2	1	NA
7. The organization of the units was easily understood.	5	4	3	2	1	NA
8. The objectives of each unit define the competencies third grade students should master in social studies.	5	4	3	2	1	NA
9. Theory and content of various thinking skill strategies presented were reflected in the units.	5	4	3	2	1	NA
10. The units helped me to prepare for introducing thinking skills into the social studies curriculum.	5	4	3	2	1	NA
11. The materials presented in the units were appropriate for third grade students.	5	4	3	2	1	NA
12. My overall reaction to these units is that they are helpful, complete and well done.	5	4	3	2	1	NA
13. The presenter was prompt for in-service presentations.	5	4	3	2	2	NA
14. The presenter presented the material in the alloted amount of time.	5	4	3	2	1	NA
15. The presenter was adequately prepared for the in-service presentation.	5	4	3	2	1	NA

Comments: Please indicate below any areas that were especially helpful, need clarification or modification, etc.

DATE: _____

TO: Dr. Mary Ellen Sapp
Director of Practicums
Programs in Child and Youth Studies
Nova University/CAE
3301 College Avenue
Fort Lauderdale, FL 33314

FROM: ERIC Clearinghouse on Elementary and Early Childhood Education

RE: Practicum Report

STUDENT: Geraldine Westwood

CLUSTER: 32/II

TITLE: Integrating Thinking Skills into the Third Grade Social Studies Curriculum

The report has _____ has not _____ been tentatively accepted for abstraction in ERIC.

_____
Signed

_____
Accession Number